

Amendments to the Claims

Claims 1-22 (canceled)

23. (currently amended) A method for making a contactless acceleration switch, comprising in combination:

implanting a source, a drain, and a threshold adjustment channel in a substrate layer, and wherein the threshold adjustment channel is located substantially between the source and the drain;

forming at least two silicon dioxide insulator posts on the substrate layer, and wherein the source, the drain, and the threshold adjustment channel are located substantially between the at least two insulator posts;

forming a first sacrificial layer on the substrate layer substantially between the at least two insulator posts;

forming a mass on the first sacrificial layer;

forming a second sacrificial layer shaped to provide a pattern for forming a spring;

forming the spring on the second sacrificial layer;

removing the first sacrificial layer and the second sacrificial layer, wherein the at least two insulator posts provide an interface between the substrate layer and the spring, and wherein the spring holds the mass substantially above the substrate layer; and

forming a gate insulating layer.

24. (original) The method of Claim 23, wherein the substrate layer is composed of a semiconductor material.

25. (original) The method of Claim 24, wherein the semiconductor material is silicon.
26. (original) The method of Claim 23, wherein ion implantation is used to implant the source, the drain, and the threshold adjustment channel in the substrate layer.
27. (original) The method of Claim 23, wherein the threshold adjustment channel is doped to a level to cause the threshold adjustment channel to invert when the mass moves substantially towards the substrate layer.
28. (original) The method of Claim 23, wherein the at least two insulator posts are composed of an insulating material.
29. (original) The method of Claim 28, wherein the insulating material is silicon dioxide.
30. (original) The method of Claim 23, wherein the at least two insulator posts are thermally grown.
31. (original) The method of Claim 23, wherein wet etching is used to form the at least two insulator posts.
32. (original) The method of Claim 23, wherein the first sacrificial layer is composed of a material selected from the group consisting of silicon dioxide, polyimide, photoresist, polymer, doped

silicon, and metal.

33. (original) The method of Claim 23, wherein the first sacrificial layer is composed of silicon dioxide.

34. (original) The method of Claim 23, wherein the first sacrificial layer is thermally grown.

35. (original) The method of Claim 23, wherein wet etching is used to form the first sacrificial layer.

36. (original) The method of Claim 23, wherein the mass is composed of an electrically conductive material.

37. (original) The method of Claim 36, wherein the electrically conductive material is doped silicon.

38. (original) The method of Claim 23, wherein the mass is deposited using low pressure chemical vapor deposition.

39. (original) The method of Claim 23, wherein plasma etching is used to form the mass.

40. (original) The method of Claim 23, wherein the second sacrificial layer is composed of a material selected from the group consisting of silicon dioxide, polyimide, photoresist, polymer, doped

silicon, and metal.

41. (original) The method of Claim 23, wherein the second sacrificial layer is composed of silicon dioxide.

42. (original) The method of Claim 23, wherein low temperature oxidation is used to deposit the second sacrificial layer.

43. (original) The method of Claim 23, wherein wet etching is used to form the second sacrificial layer.

44. (original) The method of Claim 23, wherein the spring is composed of an electrically conductive material.

45. (original) The method of Claim 44, wherein the electrically conductive material is doped silicon.

46. (original) The method of Claim 23, wherein low pressure chemical vapor deposition is used to deposit the spring.

47. (original) The method of Claim 23, wherein plasma etching is used to form the spring.

48. (original) The method of Claim 23, wherein wet etching is used to remove the first sacrificial

layer and the second sacrificial layer.

49. (original) The method of Claim 23, wherein the gate insulating layer is composed of an insulating material.

50. (original) The method of Claim 49, wherein the insulating material is silicon dioxide.

51. (original) The method of Claim 23, wherein the gate insulating layer is thermally grown.

52. (currently amended) A method for making a contactless acceleration switch, comprising in combination:

implanting a source, a drain, and a threshold adjustment channel in a silicon substrate layer using ion implantation, wherein the threshold adjustment channel is located substantially between the source and the drain, and wherein the threshold adjustment channel is doped to a level to cause the threshold adjustment channel to invert when a mass moves substantially towards the silicon substrate layer;

forming at least two silicon dioxide insulator posts on the silicon substrate layer, wherein the at least two silicon dioxide insulator posts are thermally grown, wherein wet etching is used to form the at least two silicon dioxide insulator posts, and wherein the source, the drain, and the threshold adjustment channel are located substantially between the at least two silicon dioxide insulator posts;

forming a first sacrificial layer composed of silicon dioxide on the silicon substrate layer substantially between the at least two silicon dioxide insulator posts, wherein the first

sacrificial layer is thermally grown, and wherein wet etching is used to form the first sacrificial layer;

forming the mass composed of doped silicon on the first sacrificial layer, wherein the mass is deposited using low pressure chemical vapor deposition, and wherein plasma etching is used to form the mass;

forming a second sacrificial layer composed of silicon dioxide shaped to provide a pattern for forming a spring, wherein low temperature oxidation is used to deposit the second sacrificial layer, and wherein wet etching is used to form the second sacrificial layer;

forming the spring composed of doped silicon on the second sacrificial layer, wherein low pressure chemical vapor deposition is used to deposit the spring, and wherein plasma etching is used to form the spring;

removing the first sacrificial layer and the second sacrificial layer using wet etching, wherein the at least two insulator posts provide an interface between the substrate layer and the spring, and wherein the spring holds the mass substantially above the silicon substrate layer; and

forming a gate insulating layer composed of silicon dioxide, and wherein the gate insulating layer is thermally grown.